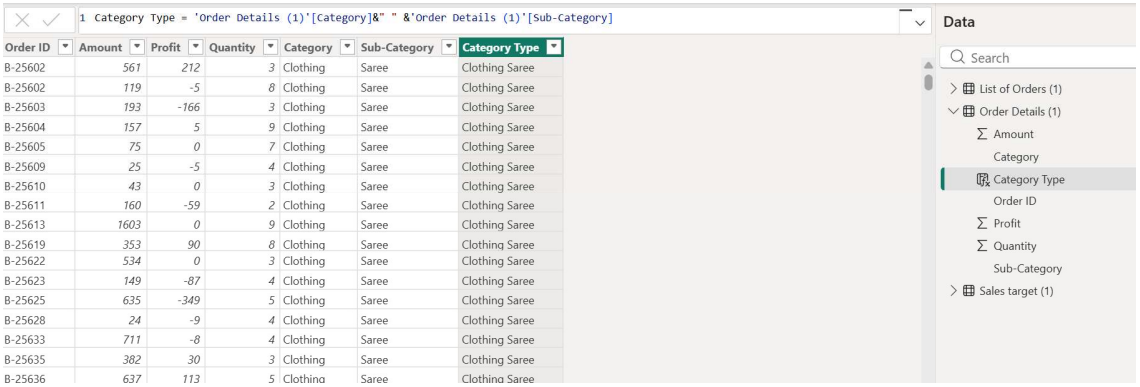
Power BI Assignment 2 – DAX & Data Visualization

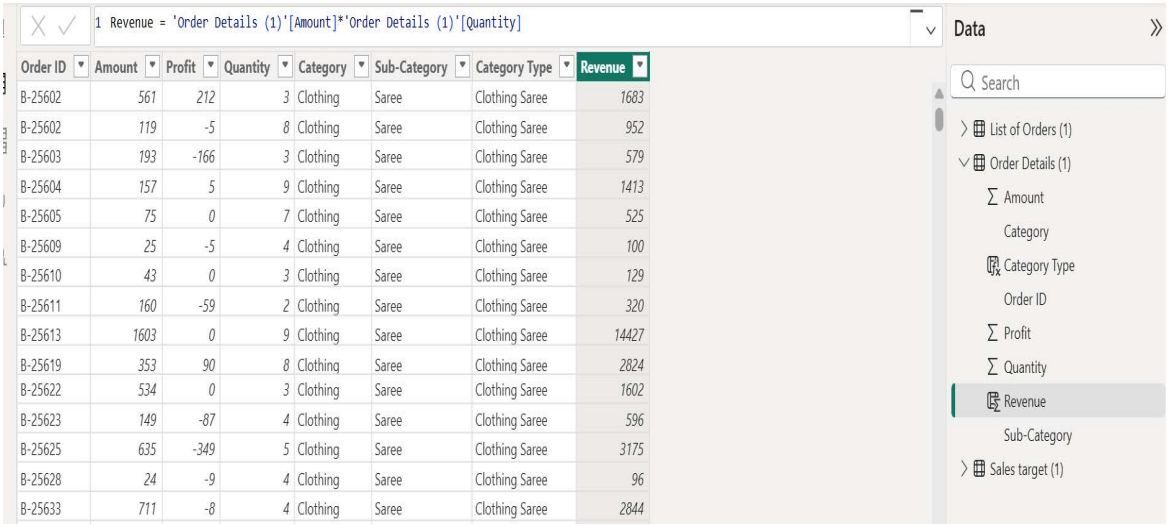
Calculated Columns:

1. Create a Calculated Column for 'Category Type': Add a calculated column in the Order Details table that combines the 'Category' and 'Sub-Category' columns into a single 'Category Type' column.



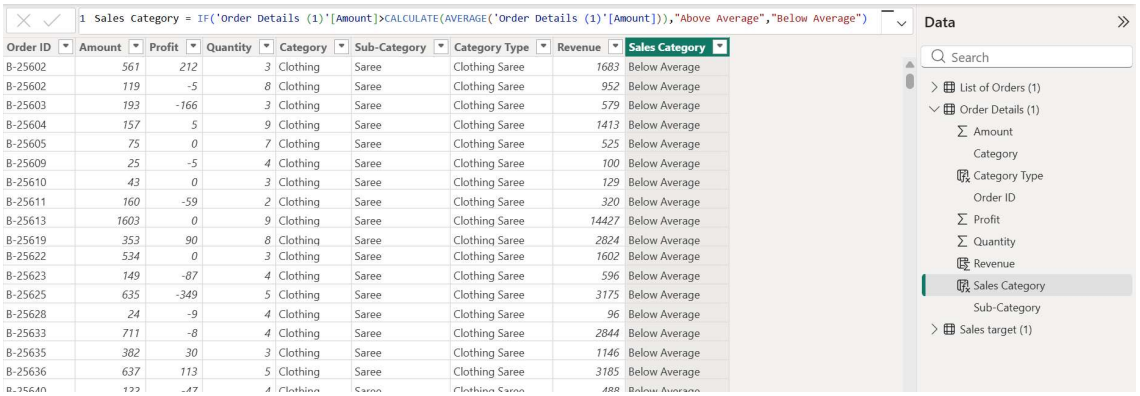
Order ID	Amount	Profit	Quantity	Category	Sub-Category	Category Type
B-25602	561	212	3	Clothing	Saree	Clothing Saree
B-25602	119	-5	8	Clothing	Saree	Clothing Saree
B-25603	193	-166	3	Clothing	Saree	Clothing Saree
B-25604	157	5	9	Clothing	Saree	Clothing Saree
B-25605	75	0	7	Clothing	Saree	Clothing Saree
B-25609	25	-5	4	Clothing	Saree	Clothing Saree
B-25610	43	0	3	Clothing	Saree	Clothing Saree
B-25611	160	-59	2	Clothing	Saree	Clothing Saree
B-25613	1603	0	9	Clothing	Saree	Clothing Saree
B-25619	353	90	8	Clothing	Saree	Clothing Saree
B-25622	534	0	3	Clothing	Saree	Clothing Saree
B-25623	149	-87	4	Clothing	Saree	Clothing Saree
B-25625	635	-349	5	Clothing	Saree	Clothing Saree
B-25628	24	-9	4	Clothing	Saree	Clothing Saree
B-25633	711	-8	4	Clothing	Saree	Clothing Saree
B-25635	382	30	3	Clothing	Saree	Clothing Saree
B-25636	637	113	5	Clothing	Saree	Clothing Saree

2. Calculate Revenue per Order in Order Details Table: Create a calculated column in the Order Details table to compute the revenue (Amount * Quantity) per order.



Order ID	Amount	Profit	Quantity	Category	Sub-Category	Category Type	Revenue
B-25602	561	212	3	Clothing	Saree	Clothing Saree	1683
B-25602	119	-5	8	Clothing	Saree	Clothing Saree	952
B-25603	193	-166	3	Clothing	Saree	Clothing Saree	579
B-25604	157	5	9	Clothing	Saree	Clothing Saree	1413
B-25605	75	0	7	Clothing	Saree	Clothing Saree	525
B-25609	25	-5	4	Clothing	Saree	Clothing Saree	100
B-25610	43	0	3	Clothing	Saree	Clothing Saree	129
B-25611	160	-59	2	Clothing	Saree	Clothing Saree	320
B-25613	1603	0	9	Clothing	Saree	Clothing Saree	14427
B-25619	353	90	8	Clothing	Saree	Clothing Saree	2824
B-25622	534	0	3	Clothing	Saree	Clothing Saree	1602
B-25623	149	-87	4	Clothing	Saree	Clothing Saree	596
B-25625	635	-349	5	Clothing	Saree	Clothing Saree	3175
B-25628	24	-9	4	Clothing	Saree	Clothing Saree	96
B-25633	711	-8	4	Clothing	Saree	Clothing Saree	2844

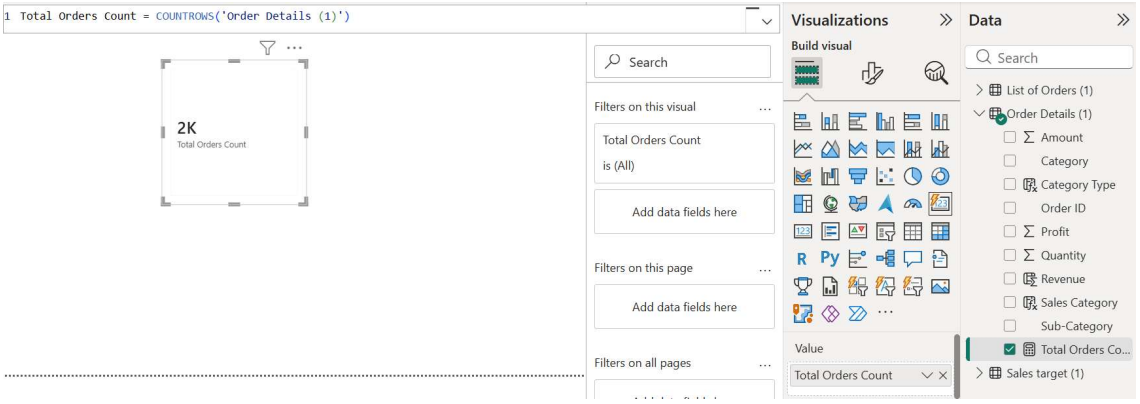
3. Create a Calculated Column to Categorize Sales: Add a calculated column named ‘Sales Category’ in the Order Details table that categorizes each order as 'Above Average' or 'Below Average' based on the Amount value.



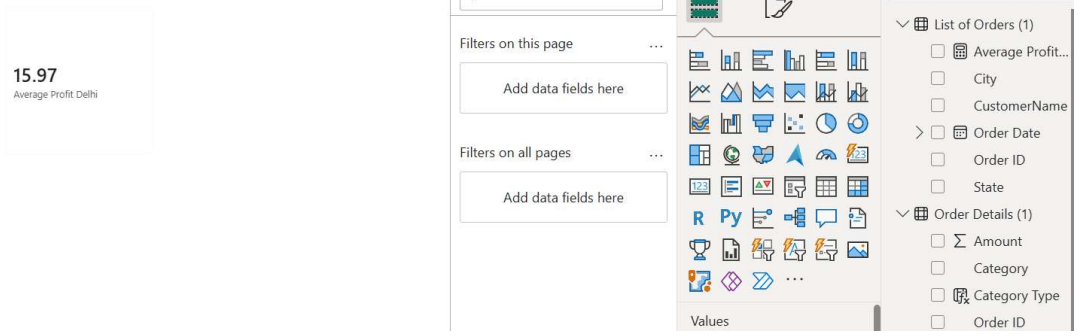
Order ID	Amount	Profit	Quantity	Category	Sub-Category	Category Type	Revenue	Sales Category
B-25602	561	212	3	Clothing	Saree	Clothing Saree	1683	Below Average
B-25602	119	-5	8	Clothing	Saree	Clothing Saree	952	Below Average
B-25603	193	-166	3	Clothing	Saree	Clothing Saree	579	Below Average
B-25604	157	5	9	Clothing	Saree	Clothing Saree	1413	Below Average
B-25605	75	0	7	Clothing	Saree	Clothing Saree	525	Below Average
B-25609	25	-5	4	Clothing	Saree	Clothing Saree	100	Below Average
B-25610	43	0	3	Clothing	Saree	Clothing Saree	129	Below Average
B-25611	160	-59	2	Clothing	Saree	Clothing Saree	320	Below Average
B-25613	1603	0	9	Clothing	Saree	Clothing Saree	14427	Below Average
B-25619	353	90	8	Clothing	Saree	Clothing Saree	2824	Below Average
B-25622	534	0	3	Clothing	Saree	Clothing Saree	1602	Below Average
B-25623	149	-87	4	Clothing	Saree	Clothing Saree	596	Below Average
B-25625	635	-349	5	Clothing	Saree	Clothing Saree	3175	Below Average
B-25628	24	-9	4	Clothing	Saree	Clothing Saree	96	Below Average
B-25633	711	-8	4	Clothing	Saree	Clothing Saree	2844	Below Average
B-25635	382	30	3	Clothing	Saree	Clothing Saree	1146	Below Average
B-25636	637	113	5	Clothing	Saree	Clothing Saree	3185	Below Average

Calculated Measures:

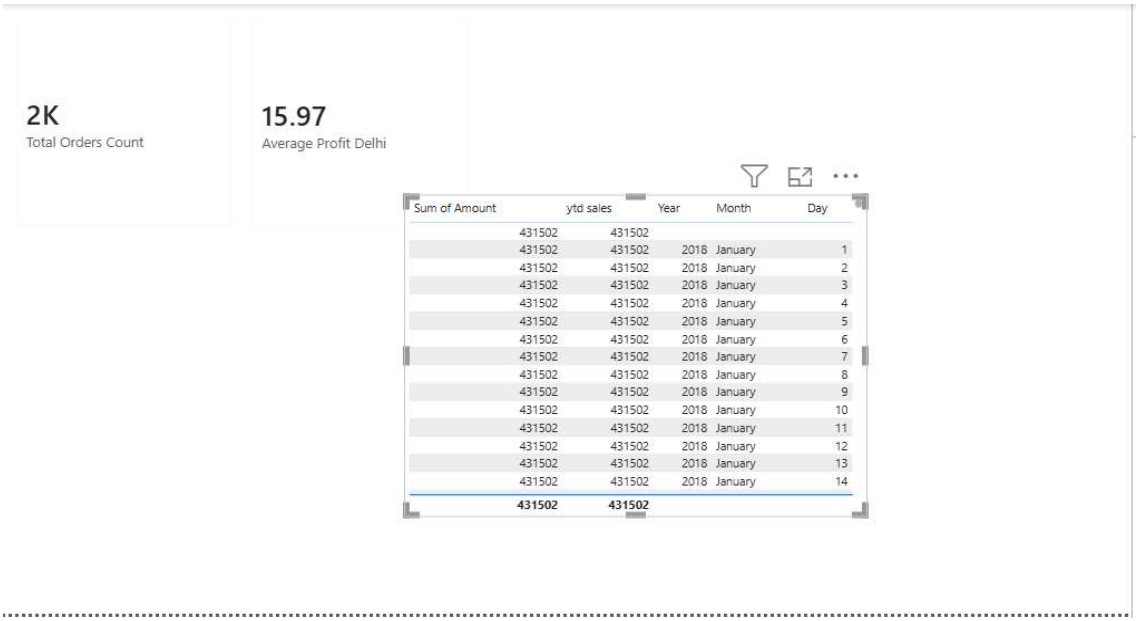
1. Calculate Order Count: Define a measure to count the total number of orders in the Order Details table.



2.Calculate Average Profit in Delhi: Create a measure to calculate the average profit for orders placed in Delhi.



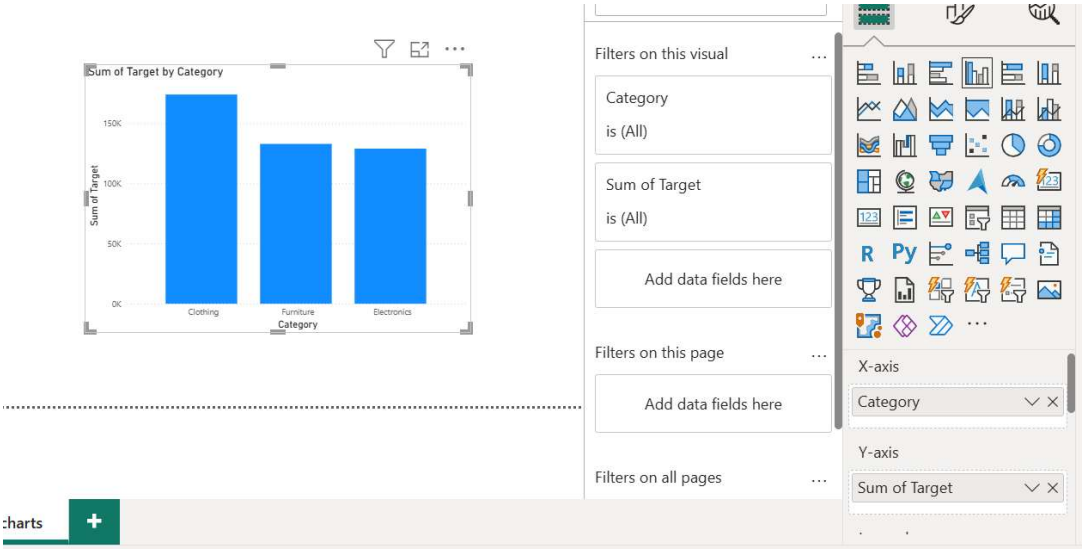
3.Calculate Year-to-Date (YTD) Sales: Define a measure to calculate the total sales amount accumulated from the earliest order date up to each order date.



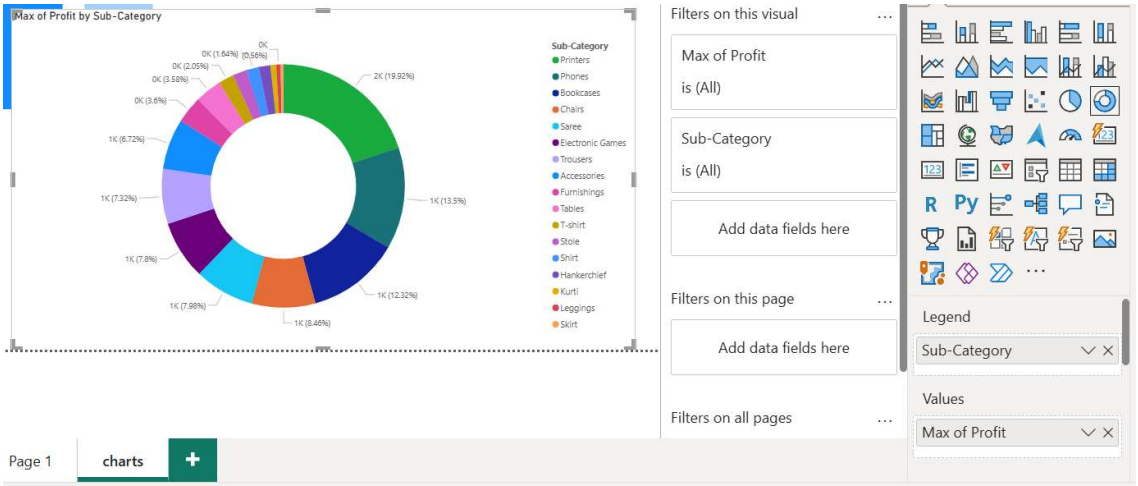
Sum of Amount	ytd sales	Year	Month	Day
431502	431502			
431502	431502	2018	January	1
431502	431502	2018	January	2
431502	431502	2018	January	3
431502	431502	2018	January	4
431502	431502	2018	January	5
431502	431502	2018	January	6
431502	431502	2018	January	7
431502	431502	2018	January	8
431502	431502	2018	January	9
431502	431502	2018	January	10
431502	431502	2018	January	11
431502	431502	2018	January	12
431502	431502	2018	January	13
431502	431502	2018	January	14
431502	**431502**			

Data Visualization:

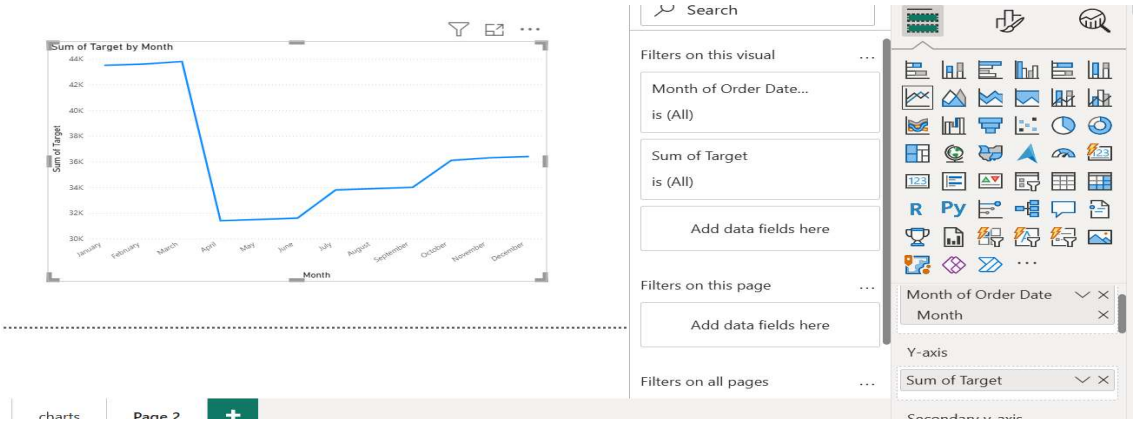
1. Sales Target Achievement by Category: Compare actual sales with sales targets by category using a clustered column chart.



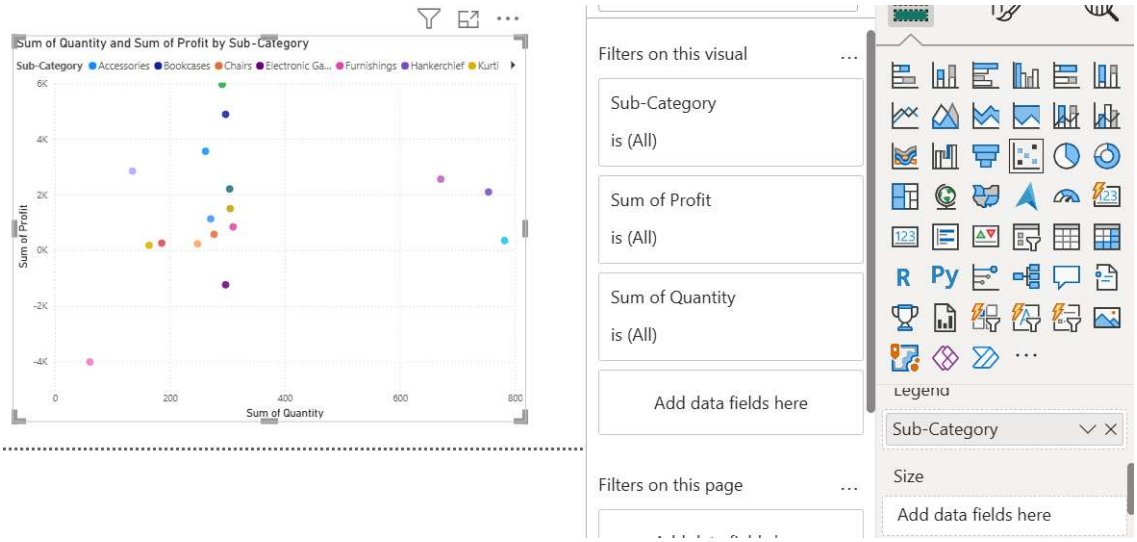
2. Max Profit Margin by Sub-Category: Analyze the maximum profit margin for each sub-category of products using a donut chart.



3. Monthly Sales Trend: Show the trend of monthly sales over time using a line chart.

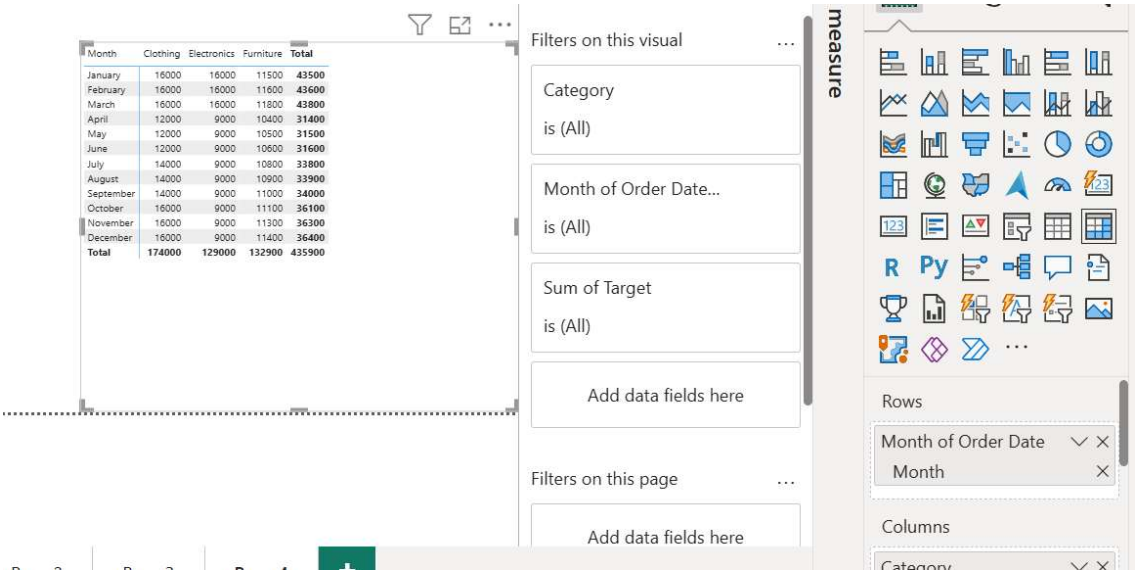


4. Comparison of Profit and Quantity by Sub-Category: Compare the relationship between profit and quantity sold for different sub-categories using a scatter chart.

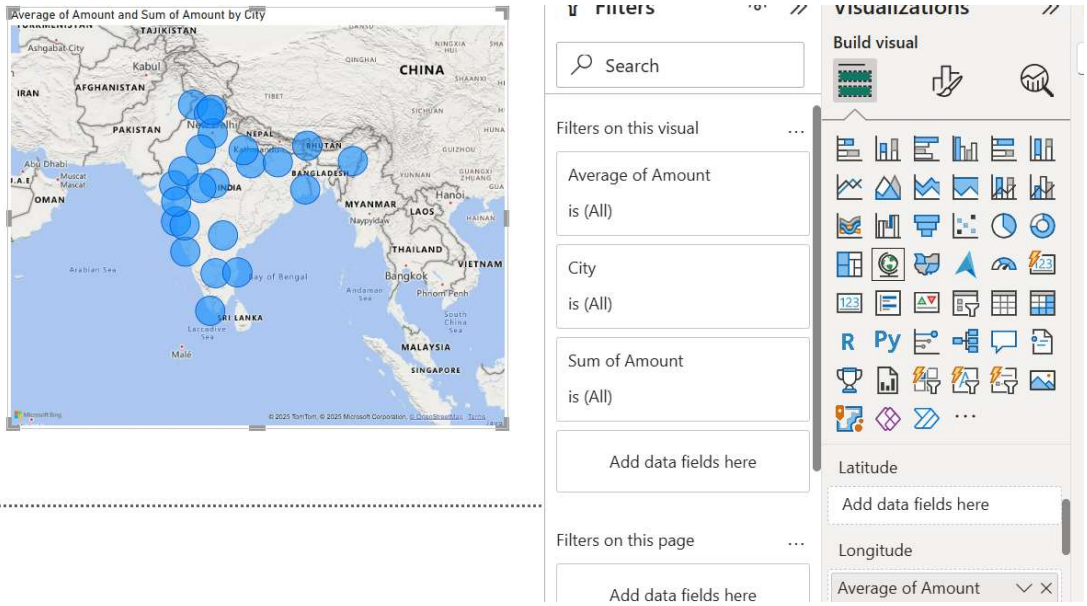


5. Comparison of Total Sales Amount and Target: Create cards to succinctly display the total sales amount alongside the sales target for quick comparison and analysis. Also, create a multi-row card to display the minimum target for each segment.

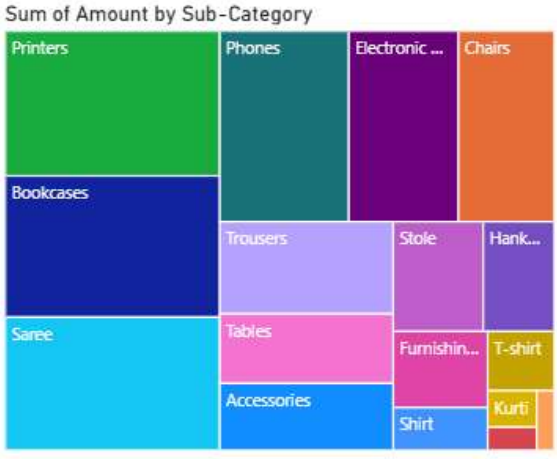
6. Sales Performance Matrix: Build a matrix view to analyze how actual sales compare to sales targets across different categories and months.



7. Geographic Sales Analysis: Visualize total sales on a map by city to identify regional sales patterns.



8. Sales Distribution by Sub-Category: Represent the sales distribution across different sub-categories using a treemap.



9. Order Count Analysis by State: Create a funnel chart to visualize the distribution of order counts across different states.